

**WHAT IS CLAIMED IS:**

1. An apparatus for turning bound pages, the apparatus comprising:

a support assembly for holding the bound pages;

5 a lifting assembly coupled to the support assembly and capable of lifting at least a portion of a page; and

a turnstile assembly, the turnstile assembly comprising a plurality of flippers;

10 a motor assembly coupled to the support assembly and coupled to the turnstile assembly;

wherein the turnstile assembly has a rest position in which one of the plurality of flippers is positioned across two opposed bound pages to hold the bound pages in an open condition; and

15 wherein the motor assembly rotates the turnstile assembly causing the lifting assembly to lift one of the pages and one of the plurality of flippers to rotate underneath the lifted page; and

20 wherein the finger underneath the lifted page is rotated to turn the page and to place the turnstile in the rest position.

2. The apparatus for turning pages of claim 1 wherein the support assembly further comprises:

25 an expandable bracket for supporting a spine of the bound pages;

a horizontal crossbar mounted on the expandable bracket; and

a pair of expandable folding arms coupled to the horizontal crossbar.

30

3. The apparatus for turning pages of claim 1 wherein the pages may be turned either forward or backward.

4. The apparatus for turning pages of claim 1 wherein the motor assembly further comprises:

a reversible electric motor;

5 a gear reducer coupled to the electric motor;

an output shaft coupled to the gear reducer and to the turnstile assembly;

a left limiting switch coupled to the electric motor; and

a right limiting switch coupled to the electric motor.

10 5. The apparatus for turning pages of claim 4 wherein: the turnstile assembly further comprises:

a disk coupled to the output shaft of the reducing gear, the disk having a top surface and a side surface;

15 a plurality of pins coupled to the top surface of the disk; and

a plurality of limiting pins coupled to the side surface of the disk, each of the limiting pins being engageable with the left limiting switch and the right limiting switch.

20 6. The apparatus for turning pages of claim 5 wherein the lifting assembly further comprises a right lifting assembly and a left lifting assembly;

25 wherein a wheel is coupled to the support assembly;

wherein each of the right lifting assembly and the left lifting assembly further comprises:

a base assembly comprising:

a track;

30 a board slideably coupled to the track;

an L-shaped bracket coupled to the board, the L-shaped bracket having a rotatable bias pin, wherein the bias pin is

engageable with at least one of the plurality of pins coupled to the top surface of the disk; and

a linkage rotatably coupled to the board; and

a finger assembly comprising:

5 a bar;

a yoke pivotally coupled to the board and rotatably coupled to the bar;

a cam coupled to the bar, the cam being engageable with the roller coupled to the support assembly;

10 wherein upon rotation of the turnstile assembly, at least one of the plurality of pins on the disc engages the pin on the L-shaped bracket causing the board to slide along the track and the cam to engage with the roller coupled to the support assembly, thereby causing the bar to rotate relative to the yoke, thereby bringing an end of the bar into contact with a  
15 page; and

wherein continued rotation of the turnstile assembly causes the linkage to engage another of the plurality of pins on the disc, thereby causing the linkage to rotate the bar and the yoke  
20 relative to the board, thereby lifting a page.

7. The apparatus for turning pages of claim 6 wherein the finger assembly further comprises a flexible bellow attached to the distal end of the bar.

25

8. The apparatus for turning pages of claim 6 wherein each of the right lifting assembly and the left lifting assembly further comprises:

a first spring coupled to the linkage and the board, the first spring exerting a bias force against the linkage; and  
30

a second spring coupled to board and the track, the second spring exerting a bias force against the board.

9. The apparatus for turning pages of claim 1 further comprising at least one button electrically coupled to the motor for energizing the motor.

5

10. The apparatus for turning pages of claim 1 further comprising at least one of a foot pedal, a breath-controlled switch, a chin switch, a voice activation device, and a computerized timer electrically coupled to the motor for energizing the motor.

10

11. A method for turning bound pages comprising:  
selecting the apparatus of claim 1;  
placing bound pages in the support assembly; and  
energizing the motor assembly to turn at least one of the bound pages.

15

12. An apparatus for turning bound pages, the apparatus comprising:

20

a support assembly for holding the bound pages;  
a lifting means for lifting a portion of a page coupled to the support assembly; and

a turnstile assembly, the turnstile assembly comprising a plurality of flippers;

25

a motor assembly coupled to the support assembly and coupled to the turnstile assembly;

wherein the turnstile assembly has a rest position in which one of the plurality of flippers is positioned across two opposed bound pages to hold the bound pages in an open condition; and

30

wherein the turnstile assembly is rotated by the motor assembly causing the lifting means to lift one of the pages and

one of the plurality of flippers to rotate underneath the lifted page; and

wherein the finger underneath the lifted page is rotated to turn the page and to place the turnstile in the rest position.

5

13. An apparatus for turning bound pages, the apparatus comprising:

a rotatable turnstile assembly, the turnstile assembly comprising at least one lifting finger;

10 a transportation assembly coupled to the turnstile assembly, the transportation assembly further comprising a plurality of finger assemblies;

wherein the transportation assembly has a rest position in which the finger assemblies hold the bound pages in an open condition; and

15

wherein rotation of the turnstile assembly moves the transportation assembly in a lateral direction to lift one of the pages and moves the lifting finger underneath the lifted page; and

20 wherein the lifting finger underneath the lifted page is rotated to turn the page.

14. The apparatus for turning pages of claim 13 further comprising a plurality of rods extending in the lateral direction; and wherein:

25

the turnstile assembly further comprises:

a pinion gear; and

two lifting fingers;

the transportation assembly further comprises:

30

a rack gear coupled to the pinion gear; and

two yoke assemblies coupled to the rack gear, each yoke assembly further comprising:

a base slideably coupled to the plurality of rods;

a base bracket rotatably coupled to the base; and

a yoke coupled to one of the finger assemblies,  
5 the yoke being rotatably coupled to the base bracket;  
and

wherein rotation of the pinion gear moves the rack gear,  
causing the yoke assemblies and the finger assemblies to move  
along the plurality of rods.

10

15. The apparatus for turning pages of claim 14 further  
comprising two ramp assemblies;

wherein each of the yokes further comprises a roller  
follower; and

15

wherein the roller follower of one yoke engages one of the  
ramp assemblies as the transportation assembly is moved in the  
lateral direction to rotate the yoke and bring the finger  
assembly coupled to the yoke into contact with the book page.

20

16. The apparatus for turning pages of claim 15 further  
comprising two limiting lever arms;

wherein each of the base brackets further comprises a lever  
arm; and

25

wherein the lever arm of one base bracket engages one of  
the limiting lever arms as the transportation assembly is moved  
in the lateral direction to rotate the base bracket, the yoke,  
and the finger assembly coupled to the yoke away from the book  
page.

30

17. The apparatus for turning pages of claim 14 further  
comprising:

a reversible electric motor coupled to the turnstile

assembly;

a limiting switch which upon contact with the transportation assembly reverses the direction of the motor to move the transportation assembly back to the rest position.

5

18. The apparatus for automatically turning pages of claim 17 further comprising at least one button electrically coupled to the motor for energizing the motor.

10

19. The apparatus for automatically turning pages of claim 17 further comprising at least one of a foot pedal, a breath-controlled switch, a chin switch, a voice activation device, and a computerized timer electrically coupled to the motor for energizing the motor.

15

20. The apparatus for turning pages of claim 13 wherein the pages may be turned either forward or backward.

21. The apparatus of claim 13, wherein each finger assembly further comprises a rubber tip.

20